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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 824,725	04 04 2001	Alex Hornig	HORN3003 EM 6664	1747

7590 05 09 2003
Bacon & Thomas
625 Slaters Lane - 4th Floor
Alexandria, VA 22314

EXAMINER

LE, DANG D

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 05 09 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/824,725	HORNG ET AL.	
	Examiner Dang D Le	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 March 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.
- 4) Claim(s) 1-11 and 13-18 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 - 5) Claim(s) _____ is/are allowed.
 - 6) Claim(s) 1-11 and 13-18 is/are rejected.
 - 7) Claim(s) _____ is/are objected to.
 - 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

- 4) Interview Summary (PTO-413) Paper No(s). _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 13 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 3/4/03 have been fully considered but they are not persuasive. The applicant's arguments are on the ground that "the plate 44 of Shiraki is not a balancing plate but rather is a stator yoke that cannot have a balancing effect since it is designed to be asymmetric" and that "Shiraki does not disclose any sort of flange and the inwardly extending portion of holding member 20 of Hsieh is not "thin'."

The examiner disagrees because the plate 44 of Shiraki not only provides a self-starting function but also reduces vibration and noise by balancing the rotor rotation. In fact, the plate 44 of Shiraki can be called "self-starting and balancing plate" instead of "stator yoke". Similarly, the balance plate 11 (or 98) in the present application can be called "stator yoke". Originally, the plate 21 of Shiraki is used for reducing vibration and noise by balancing the rotor rotation. See Figure 14 and columns 1-8. In order to allow self-starting while maintaining low noise, the plate 21 is modified to become plate 44. See Figure 6 and columns 9 and 10.

In addition, the plates 21 and 44 are symmetric according to Merriam-Webster's Collegiate Dictionary because they are "capable of division by a longitudinal plane into similar halves." See page 1194.

Moreover, although Shiraki does not disclose any sort of flange, Hsieh shows a flange 20 for radially supporting the shaft rotation. As the applicant admitted that "thin" is a relative term" and although the flange 20 of Hsieh "occupies at least 60% of the length of the holding member," the pending claims do not particularly point out and distinctly identify the "thin" flange. In fact, the flange 20 of Hsieh is thin comparing to the axial thickness of the fan 40.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh in view of the applicant's admitted of prior art.

Regarding claims 1 and 13, Hsieh shows all of the limitations of the claimed invention except for the balance plate.

The applicant's admitted of prior art (Figure 1) shows a balance plate (98) for the purpose of reducing noise.

Since Hsieh and the applicant's admitted of prior art are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to mount a balance plate to the base as taught by the applicant's admitted of prior art for the purpose discussed above.

6. Claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh in view of Shiraki et al.

Regarding claims 1 and 13, Hsieh shows all of the limitations of the claimed invention except for the balance plate.

Shiraki et al. (Figure 6) use a balance plate for the purpose of reducing noise.

Since Hsieh and Shiraki et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to mount a balance plate to the base as taught by Shiraki et al. for the purpose discussed above.

7. Claims 1, 2, 4, 5, 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh in view of Egami et al.

Regarding claims 1 and 13, Hsieh shows all of the limitations of the claimed invention except for the balance plate.

Egami et al. (Figure 4) use a balance plate for the purpose of reducing noise.

Since Hsieh and Egami et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to mount a balance plate to the base as taught by Egami et al. for the purpose discussed above.

Regarding claim 2, it is noted that Hsieh also shows the axle tube including a hole (inner circumferential surface of (41), and wherein the holding member (20), the support member (13), and the fixing member (12) are tightly engaged with an inner periphery defining the hole of the axle tube.

Regarding claim 4, it is noted that Hsieh also shows the holding member being a ring directly mounted to an inner periphery of the axle tube.

Regarding claim 5, it is noted that Hsieh also shows the holding member being a ring, the axle tube including an inner periphery having a stepped portion (412) on which the ring rests.

Regarding claims 11 and 14, it is noted that Hsieh also shows the axle tube including an inner periphery having a stepped portion (412) against which the fixing member (12) abuts.

Regarding claim 13, the claim is similar to claim 1 except that it recites "a metal axle tube including a ring formed on an inner periphery thereof". It is noted that Hsieh also show the ring (412) formed on an inner periphery thereof. As a result, claim 13 is also rejected.

8. Claims 3, 6-10 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh (U. S. Pat. No. 6,183,221) in view of Egami et al. as respectively applied to claims 1 and 13 above, and further in view of Higuchi et al.

Regarding claim 3, Hsieh and Egami shows all of the limitations of the claimed invention with the axle tube including a hole, the holding member and the support member being tightly engaged with an inner periphery defining the hole of the axle tub except for the fixing member being sandwiched between the holding member and the support member.

Higuchi et al. show for the fixing member being sandwiched between the holding member and the support member (Figure 3) for the purpose of retaining the fixing member in place.

Since Hsieh, Egami et al., and Higuchi et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to sandwich the fixing member between the holding member and the support member as taught by Higuchi et al. for the purpose discussed above.

Regarding claim 6, it is noted that Higuchi et al. also show the axle tube including an inner periphery having a stepped portion (bottom portion) against which the support member abuts (Figure 3).

Regarding claims 7 and 15, it is noted that Higuchi et al. also show the support member including a closed bottom (portion supporting 45) that forms the supporting portion.

Regarding claims 8 and 16, it is noted that Higuchi et al. also show the supporting portion of the support member including a hole, further comprising a cover (45) for covering the hole, the end face of the distal end of the shaft rotatably resting on the cover (Figure 1).

Regarding claims 9 and 17, it is noted that Higuchi et al. also show the fixing member including an annular wall which abuts against the supporting portion of the support member (Figure 3).

Regarding claims 10 and 18, it is noted that Higuchi et al. also show the axle tube (32) including an inner periphery having a stepped portion against which the fixing member and the supporting member abuts.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information on How to Contact USPTO

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.

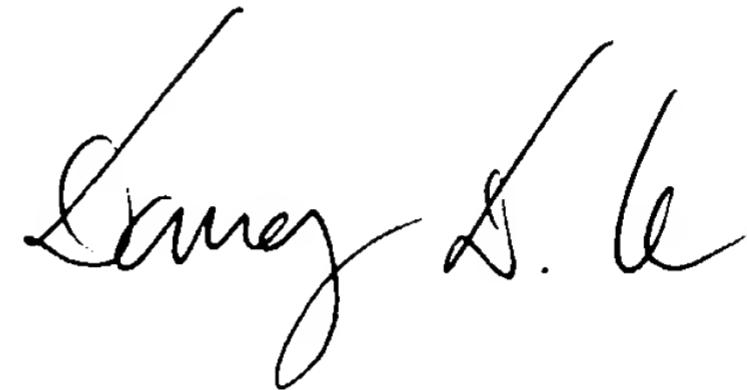
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

May 8, 2003

A handwritten signature in black ink, appearing to read "Dang Le".

DANG LE
PRIMARY EXAMINER